Kelly,Virginia

From: Wirick, Donna [Donna_Wirick@kindermorgan.com]
Sent: Monday, May 05, 2008 11:05 AM
To: Kelly,Virginia
Cc: Donald E. Jones
Subject: RE: Kinder Morgan SE Terminals VPDES permit application

Gina,

Sorry about the delay getting your answers on the asphalt operation.

KMST Richmond #2 receives the finished asphalt by barge into heated tanks. We only add water to the mixture in the tanks, and then additive at the loading rack.

There is no cooling water used or condensate collected for discharge.

Please let me know if you need additional information for the permit - my cell phone is probably best way to reach me for the next few weeks.

Thanks!

Donna L. Wirick
EHS Manager
Kinder Morgan Energy Partners
2000 Trenton Avenue
Richmond, VA 23234
804-743-5778 office
804-513-0719 cell
832-397-4755 fax

From: Donald E. Jones [mailto:djones@qualityenvironmental.net]
Sent: Thursday, May 01, 2008 4:21 PM
To: Kelly,Virginia
Cc: Wirick, Donna
Subject: Re: Kinder Morgan SE Terminals VPDES permit application

Gina, I wanted to set the record straight on the hydrostatic test calculations. First of all, the "2.26" on the Terminal Data attachment was incorrect and should have been "1.37." A corrected page is attached. The flow data are based on an average of one hydrostatic test per year. 2007 was unusual with three tests as the ASTs were being placed into DOT service and the hydrostatic tests were required. I do not believe that there were tests in the previous two or more years. The 1.37 MG was based on the average capacity of all the facility ASTs > 420,000 gallons in size resulting in an average daily discharge of 0.004 MGD. The maximum discharge was based on a maximum discharge rate of 250 GPM. As for the data in Form 2C Question II.C, the average duration of the hydrostatic test discharge should be 4 days (not 10) based on the maximum discharge of 250 GPM. I hope this addresses the confusion. Thanks. Don.

> ----- Original Message -----
> **From:** Kelly,Virginia
> **To:** djones@qualityenvironmental.net
> **Cc:** donna_wirick@kindermorgan.com

Kelly,Virginia

From: Donald E. Jones [djones@qualityenvironmental.net]
Sent: Thursday, May 01, 2008 4:21 PM
To: Kelly,Virginia
Cc: Donna Wirick
Subject: Re: Kinder Morgan SE Terminals VPDES permit application

Gina, I wanted to set the record straight on the hydrostatic test calculations. First of all, the "2.26" on the Terminal Data attachment was incorrect and should have been "1.37." A corrected page is attached. The flow data are based on an average of one hydrostatic test per year. 2007 was unusual with three tests as the ASTs were being placed into DOT service and the hydrostatic tests were required. I do not believe that there were tests in the previous two or more years. The 1.37 MG was based on the average capacity of all the facility ASTs > 420,000 gallons in size resulting in an average daily discharge of 0.004 MGD. The maximum discharge was based on a maximum discharge rate of 250 GPM. As for the data in Form 2C Question II.C, the average duration of the hydrostatic test discharge should be 4 days (not 10) based on the maximum discharge of 250 GPM. I hope this addresses the confusion. Thanks. Don.

----- Original Message -----
From: Kelly,Virginia
To: djones@qualityenvironmental.net
Cc: donna_wirick@kindermorgan.com
Sent: Monday, April 21, 2008 5:35 PM
Subject: Kinder Morgan SE Terminals VPDES permit application

Hi Don,

I wanted to follow up on this permit application. Back in February, you submitted most of the effluent sampling we needed, but there was an issue with the pesticides so another round of sampling was going to be performed that week to get the data for those 7 parameters. Please submit that data as soon as possible.

Regarding the hydrostatic test waters flows, the calculations page indicates a flow of 2.26 MG per year under "Terminal Data" and 1.36 MG per year under "Hydrostatic Test Water." The actual calculations appear to be base on 1.36 MG per year. This page also assumes 1 hydrostatic test per year under "Terminal Data" but the narrative under "Hydrostatic Test Water" seems to indicate multiple tests per year (as supported by the data summary submitted). There's also some confusion regarding the entries in Form 2C, Question II.C as they relate to the calculations page. Please clarify these issues.

Also, some questions have been posed regarding the asphalt emulsion aspect of this facility. Could you review pages 13 – 15 of the attached Development Document (pages 21 - 23, according to Adobe) and confirm which parts of the asphalt emulsion process Kinder Morgan SE Terminals is involved in?

Thanks for your help in better understanding this facility's operations.

Gina Kelly
Water Permitting
DEQ, Piedmont Regional Office
ph. 804.527.5048
fax 804.527.5106

Please consider the environment - do you really need to print this email?

Kelly,Virginia

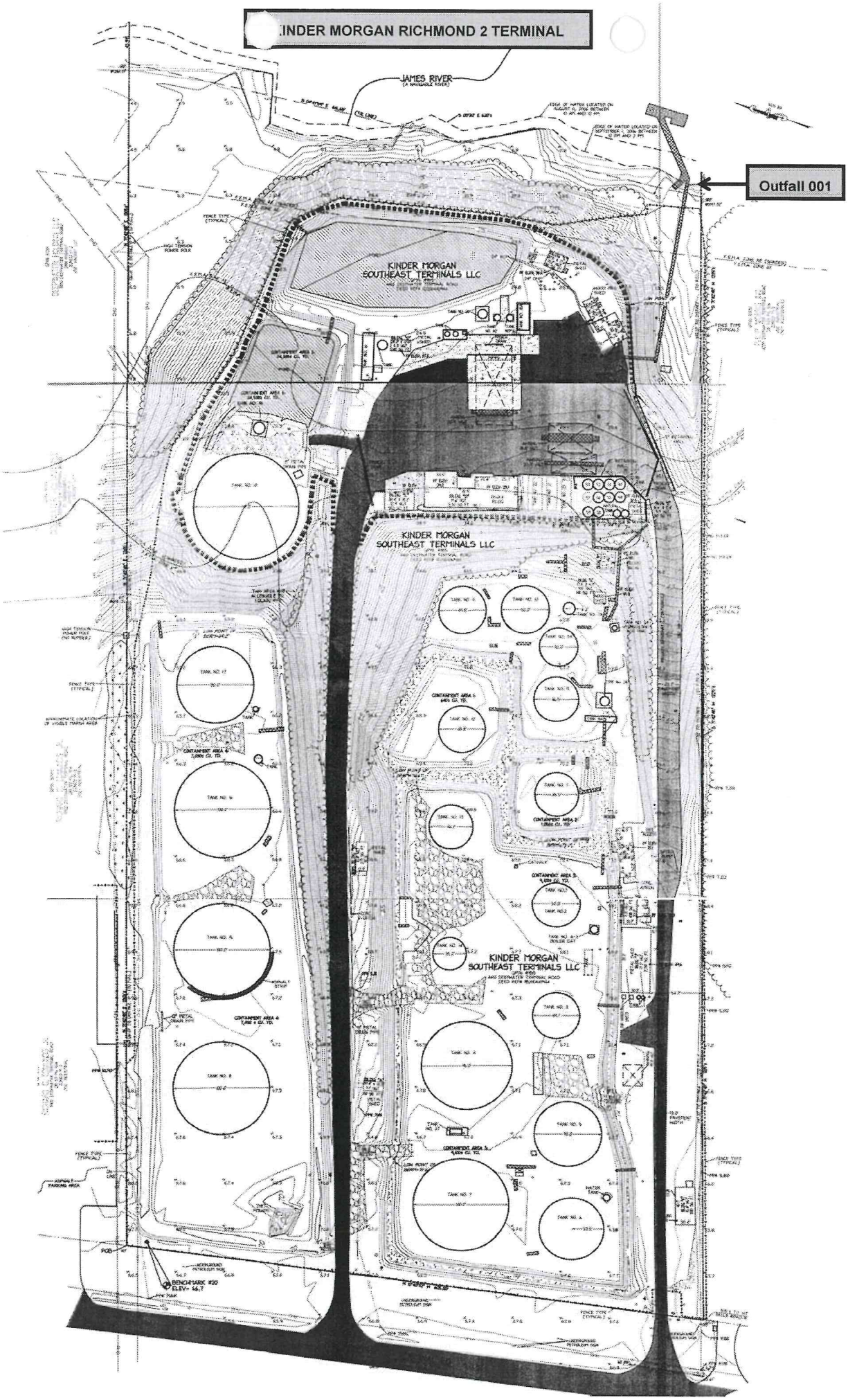
From: Donald E. Jones [djones@qualityenvironmental.net]
Sent: Wednesday, January 30, 2008 5:24 PM
To: Kelly,Virginia
Cc: Donna Wirick
Subject: VPDES Permit No. VA0058378 Renewal

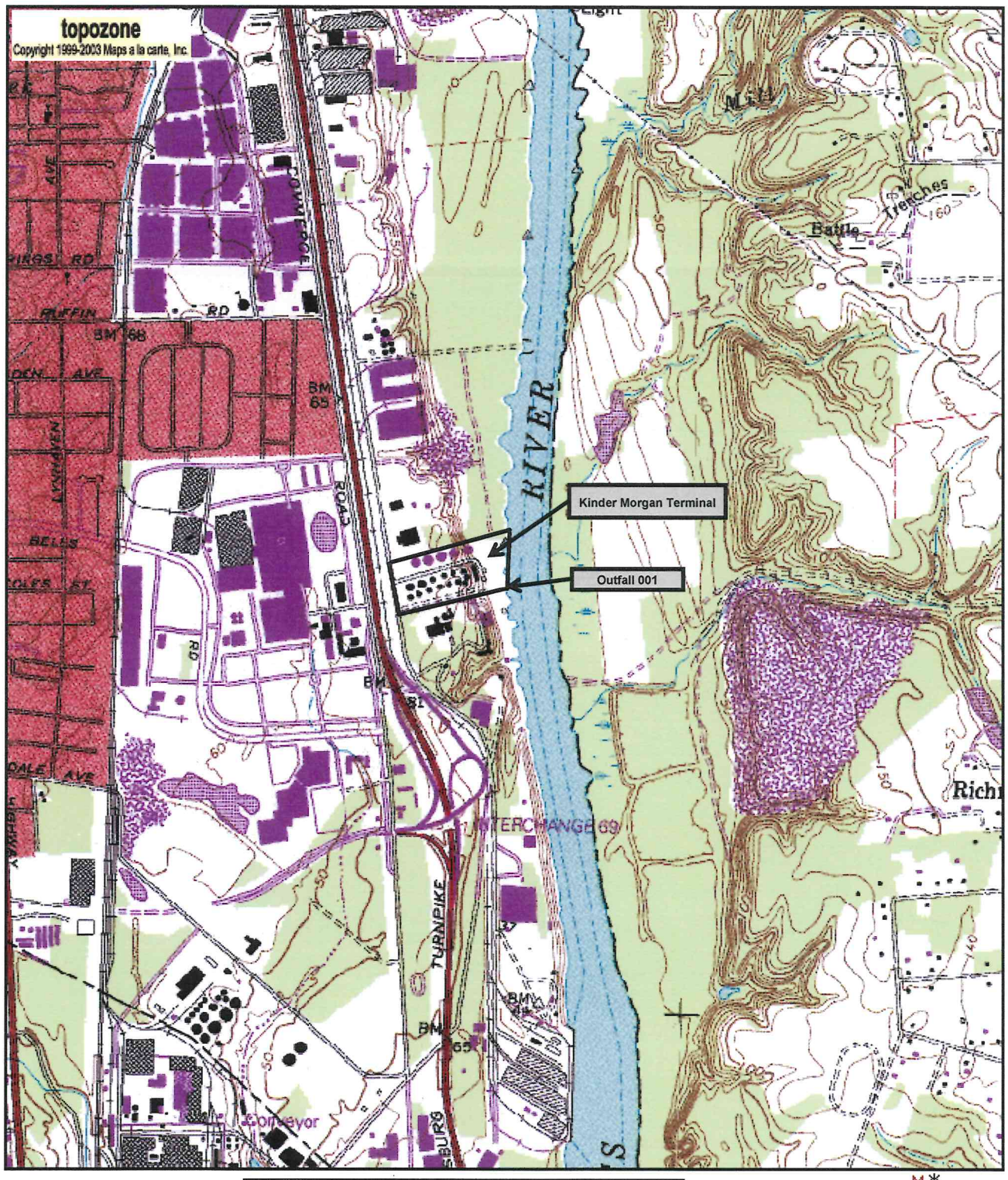
Ms. Kelly, this is in response to the January 8, 2008 request for additional information regarding the Kinder Morgan Southeast Terminals - Richmond 2 Terminal VPDES permit renewal.

- A USGS topographic map and more detailed site topographic map are attached showing the location of Outfall 001 and the property boundaries.
- The primary applicable SIC code is 4226 (Terminal for Hire) with a secondary SIC code of 2951 (Asphalt Emulsion Products and Distribution). SIC code 5171 is no longer applicable.
- The facility does produce asphalt emulsions and blends.
- Waters directed to the pond include storm-water runoff, treated water from the rack area, non-contact cooling water, boiler blow down and air compressor condensate. There are no longer wash waters from the loading rack.
- The signed public notice authorization is being submitted by Donna Wirick under separate cover.
- The additional outfall sampling was completed on January 24, 2008. Attachment A will be completed and signed once the results from the various laboratories are received.

Please contact me or Donna Wirick with any questions or additional information needs. Thanks. Don.

Donald E. Jones
Quality Environmental Solutions, Inc.
2521 Riva Road, Suite L3
Annapolis, Maryland 21401
410-841-5552
410-266-5588 (fax)


KINDER MORGAN RICHMOND 2 TERMINAL
JAMES RIVER
Outfall 001
KINDER MORGAN SOUTHEAST TERMINALS LLC
KINDER MORGAN SOUTHEAST TERMINALS LLC
KINDER MORGAN SOUTHEAST TERMINALS LLC



37° 28' 17"N, 77° 25' 25"W (NAD83/WGS84)

USGS Drewrys Bluff (VA) Quadrangle

Projection is UTM Zone 18 NAD83 Datum

Topographic Map
VPDES Permit Renewal VA0058378
Kinder Morgan Richmond 2 Terminal

VEK

QUALITY ENVIRONMENTAL SOLUTIONS, INC.

2521 RIVA ROAD, SUITE L3
ANNAPOLIS, MARYLAND 21401

December 14, 2007

RECEIVED
DEC 18 2007
PRO

Mr. Curt Linderman
Virginia Department of Environmental Quality
Piedmont Regional Office
4949 Cox Road
Glen Allen, Virginia 23060

SUBJECT: VPDES Permit No. VA0058378 Renewal Application
Kinder Morgan Richmond 2 Terminal

Dear Mr. Linderman:

On behalf of Kinder Morgan Southeast Terminals , LLC, Quality Environmental Solutions, Inc. (QES) is pleased to submit one original and three copies of the renewal application for VPDES Permit No. VA0058378. The permit renewal application package includes:

- EPA Form 1 – General Information (2 pages)
- EPA Form 2C – Existing Manufacturing, Commercial, Mining and Silviculture Operations (13 pages)
- EPA Form 2F – Application for Permit to Discharge Storm Water Discharges Associated with industrial Activity (5 pages)
- Topographic Map
- Site Plan
- Line Drawing and Water Balance
- Table of Terminal Data
- Tabulated Analytical Data

Please review the permit application and contact the undersigned or Ms. Donna Wirick of Kinder Morgan at 804-743-5778 with any questions or comments.

Sincerely,

Donald E. Jones
Senior Program Manager

Attachment: VPDES Renewal Application

Cc: D. Wirick – Kinder Morgan
D. Hildreth – Kinder Morgan

QES File 109-010

Please print or type in the unshaded areas only.

Form Approved. OMB No. 2040-0086.

FORM 1 GENERAL

U.S. ENVIRONMENTAL PROTECTION AGENCY
GENERAL INFORMATION
Consolidated Permits Program
(Read the "General Instructions" before starting.)

I. EPA I.D. NUMBER: F VAD041317876 (T/A: ; C: D)

LABEL ITEMS
I. EPA I.D. NUMBER
III. FACILITY NAME
V. FACILITY MAILING ADDRESS
VI. FACILITY LOCATION

PLEASE PLACE LABEL IN THIS SPACE

GENERAL INSTRUCTIONS

If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent *(the area to the left of the label space lists the information that should appear)*, please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete Items I, III, V, and VI *(except VI-B which must be completed regardless)*. Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.

II. POLLUTANT CHARACTERISTICS

INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of **bold-faced terms**.

SPECIFIC QUESTIONS	Mark "X" YES	NO	FORM ATTACHED	SPECIFIC QUESTIONS	Mark "X" YES	NO	FORM ATTACHED
A. Is this facility a **publicly owned treatment works** which results in a **discharge** to **waters of the U.S.**? (FORM 2A)		X		B. Does or will this facility *(either existing or proposed)* include a **concentrated animal feeding operation** or **aquatic animal production facility** which results in a **discharge** to **waters of the U.S.**? (FORM 2B)		X	
	16	17	18		19	20	21
C. Is this a facility which currently results in **discharges** to **waters of the U.S.** other than those described in A or B above? (FORM 2C)	X		X	D. Is this a proposed facility *(other than those described in A or B above)* which will result in a **discharge** to **waters of the U.S.**? (FORM 2D)		X	
	22	23	24		25	26	27
E. Does or will this facility treat, store, or dispose of **hazardous wastes**? (FORM 3)		X		F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)		X	
	28	29	30		31	32	33
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)		X		H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)		X	
	34	35	36		37	38	39
I. Is this facility a proposed **stationary source** which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X		J. Is this facility a proposed **stationary source** which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an **attainment area**? (FORM 5)		X	
	40	41	42		43	44	45

III. NAME OF FACILITY

C 1 SKIP: Kinder Morgan Southeast Terminals - Richmond 2

(15 | 16 – 29 | 30 ... 69)

IV. FACILITY CONTACT

A. NAME & TITLE *(last, first, & title)*	B. PHONE *(area code & no.)*
C 2: Smith, David, Terminal Supervisor	(804) 230-9366
(15 | 16 ... 45)	(46 | 48 | 49 | 51 | 52- | 55)

V. FACILTY MAILING ADDRESS

A. STREET OR P.O. BOX

C 3: 4110 Deepwater Terminal Road

(15 | 16 ... 45)

B. CITY OR TOWN	C. STATE	D. ZIP CODE
C 4: Richmond	VA	23234
(15 | 16 ... 40)	(41 | 42)	(47 ... 51)

VI. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER

C 5: 4110 Deepwater Terminal Road

(15 | 16 ... 45)

B. COUNTY NAME

N/A

(46 ... 70)

C. CITY OR TOWN	D. STATE	E. ZIP CODE	F. COUNTY CODE *(if known)*
C 6: Richmond	VA	23234	
(15 | 16 ... 40)	(41 | 42)	(47 ... 51)	(52 ... -54)

CONTINUE ON REVERSE

CONTINUED FROM THE FRONT

VII. SIC CODES *(4-digit, in order of priority)*

A. FIRST	B. SECOND
7 4226 (specify) Terminal for Hire	7 N/A (specify)
C. THIRD	**D. FOURTH**
7 N/A (specify)	7 N/A (specify)

VIII. OPERATOR INFORMATION

A. NAME	B. Is the name listed in Item VIII-A also the owner?
8 Kinder Morgan Southeast Terminals, LLC	☑ YES ☐ NO

C. STATUS OF OPERATOR *(Enter the appropriate letter into the answer box: if "Other," specify.)*			D. PHONE *(area code & no.)*
F = FEDERAL S = STATE P = PRIVATE	M = PUBLIC *(other than federal or state)* O = OTHER *(specify)*	P (specify)	A (770) 751-4000

E. STREET OR P.O. BOX
1100 Alderman Drive, Suite 200

F. CITY OR TOWN	G. STATE	H. ZIP CODE	IX. INDIAN LAND
B Alpharetta	GA	30005	Is the facility located on Indian lands? ☐ YES ☑ NO

X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES *(Discharges to Surface Water)*	D. PSD *(Air Emissions from Proposed Sources)*
9 N VA0058378	9 P N/A
B. UIC *(Underground Injection of Fluids)*	**E. OTHER** *(specify)*
9 U N/A	9 VA50533 (specify) Air Registration
C. RCRA *(Hazardous Wastes)*	**E. OTHER** *(specify)*
9 R N/A	9 N/A (specify)

XI. MAP

Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers, and other surface water bodies in the map area. See instructions for precise requirements.

XII. NATURE OF BUSINESS *(provide a brief description)*

Storage and distribution terminal for bulk petroleum products including gasoline, ethanol, naphtha, petroleum distillates kerosene, diesel fuel and heating oil, and asphalt products.

XIII. CERTIFICATION *(see instructions)*

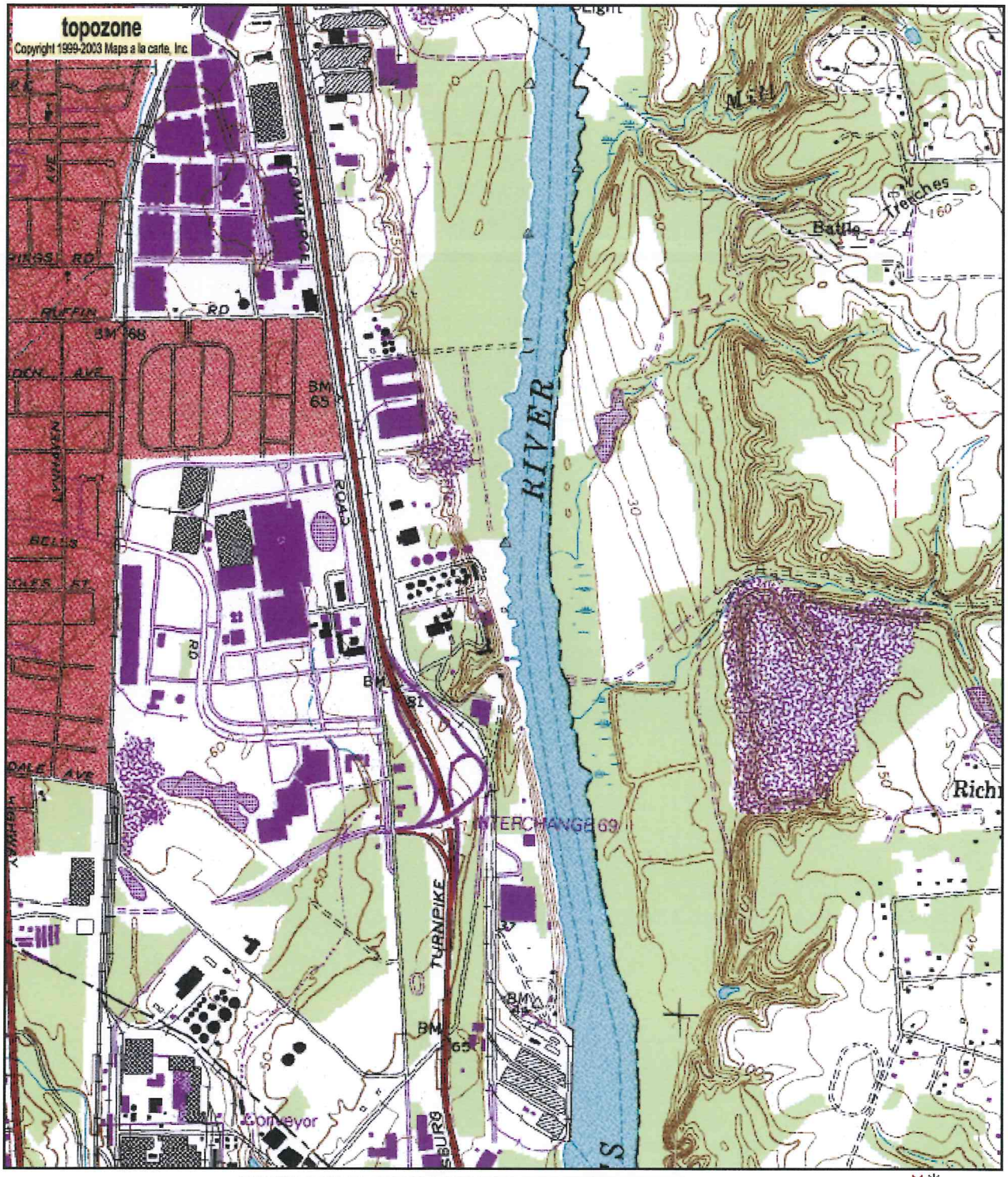
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE *(type or print)*	B. SIGNATURE	C. DATE SIGNED
David Hildreth Director, Field Operations	David Hildreth	12/14/2007

COMMENTS FOR OFFICIAL USE ONLY

C

EPA Form 3510-1 (8-90)



37° 28' 17"N, 77° 25' 25"W (NAD83/WGS84)

USGS Drewrys Bluff (VA) Quadrangle

Projection is UTM Zone 18 NAD83 Datum

M=-10.064
G=-1.475

Please print or type in the unshaded areas only.

EPA I.D. NUMBER (*copy from Item 1 of Form 1*)
VAD041317876

Form Approved.
OMB No. 2040-0086.
Approval expires 3-31-98.

FORM 2C NPDES

U.S. ENVIRONMENTAL PROTECTION AGENCY
APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER
EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURE OPERATIONS
Consolidated Permits Program

I. OUTFALL LOCATION

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

A. OUTFALL NUMBER (*list*)	B. LATITUDE			C. LONGITUDE			D. RECEIVING WATER (*name*)
	1. DEG.	2. MIN.	3. SEC.	1. DEG.	2. MIN.	3. SEC.	
001	37	28	16	77	25	25	James River

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined (*e.g., for certain mining activities*), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

B. For each outfall, provide a description of: (1) All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) The average flow contributed by each operation; and (3) The treatment received by the wastewater. Continue on additional sheets if necessary.

1. OUTFALL NO. (*list*)	2. OPERATION(S) CONTRIBUTING FLOW		3. TREATMENT		
	a. OPERATION (*list*)	b. AVERAGE FLOW (*include units*)	a. DESCRIPTION	b. LIST CODES FROM TABLE 2C-1	
001	Facility Storm Water	0.18 MGD	Settling pond	1-U	
	Loading Rack Storm Water	0.001 MGD	Separation, activated clay & carbon filtration	1-C	2-A
	Hydrostatic Test Water	0.004 MGD	Settling pond	1-U	
	Note: Flows are intermittent				

OFFICIAL USE ONLY (*effluent guidelines sub-categories*)

CONTINUED FROM THE FRONT

C. Except for storm runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal?

☑ YES (*complete the following table*) ☐ NO (*go to Section III*)

1. OUTFALL NUMBER (*list*)	2. OPERATION(s) CONTRIBUTING FLOW (*list*)	3. FREQUENCY		4. FLOW				
		a. DAYS PER WEEK (*specify average*)	b. MONTHS PER YEAR (*specify average*)	a. FLOW RATE (*in mgd*)		B. TOTAL VOLUME (*specify with units*)		C. DURATION (*in days*)
				1. LONG TERM AVERAGE	2. MAXIMUM DAILY	1. LONG TERM AVERAGE	2. MAXIMUM DAILY	
001	Hydrostatic Test Water	2.5	1	0.004	0.36	1.37 MG/year	0.36 MG	10

III. PRODUCTION

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?

☐ YES (*complete Item III-B*) ☑ NO (*go to Section IV*)

B. Are the limitations in the applicable effluent guideline expressed in terms of production (*or other measure of operation*)?

☐ YES (*complete Item III-C*) ☐ NO (*go to Section IV*)

C. If you answered "yes" to Item III-B, list the quantity which represents an actual measurement of your level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

1. AVERAGE DAILY PRODUCTION			2. AFFECTED OUTFALLS (*list outfall numbers*)
a. QUANTITY PER DAY	b. UNITS OF MEASURE	c. OPERATION, PRODUCT, MATERIAL, ETC. (*specify*)	

IV. IMPROVEMENTS

A. Are you now required by any Federal, State or local authority to meet any implementation schedule for the construction, upgrading or operations of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

☐ YES (*complete the following table*) ☑ NO (*go to Item IV-B*)

1. IDENTIFICATION OF CONDITION, AGREEMENT, ETC.	2. AFFECTED OUTFALLS		3. BRIEF DESCRIPTION OF PROJECT	4. FINAL COMPLIANCE DATE	
	a. NO.	b. SOURCE OF DISCHARGE		a. REQUIRED	b. PROJECTED

B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (*or other environmental projects which may affect your discharges*) you now have underway or which you plan. Indicate whether each program is now underway or planned, and indicate your actual or planned schedules for construction.

☐ MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED

EPA I.D. NUMBER (*copy from Item 1 of Form 1*)
VAD041317876

CONTINUED FROM PAGE 2

V. INTAKE AND EFFLUENT CHARACTERISTICS

A, B, & C: See instructions before proceeding – Complete one set of tables for each outfall – Annotate the outfall number in the space provided.
NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered V-1 through V-9.

D. Use the space below to list any of the pollutants listed in Table 2c-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

1. POLLUTANT	2. SOURCE	1. POLLUTANT	2. SOURCE
Xylene	Component of gasoline (see attached table with analytical results)		

VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

Is any pollutant listed in Item V-C a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

☐ YES (*list all such pollutants below*) ☑ NO (*go to Item VI-B*)

CONTINUED FROM THE FRONT

VII. BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☑ YES (*identify the test(s) and describe their purposes below*) ☐ NO (*go to Section VIII*)

Annual acute toxicity testing is completed in accordance with the existing VPDES permit conditions. The 48-hour static tests with five test solutions are completed annually utilizing c. dubia.

12/07 test results not yet available
12/06 48-hour LC50 for c. dubia was > 100%
12/05 48-hour LC50 for c. dubia was > 100%

VIII. CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?

☑ YES (*list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below*) ☐ NO (*go to Section IX*)

A. NAME	B. ADDRESS	C. TELEPHONE (*area code & no.*)	D. POLLUTANTS ANALYZED (*list*)
SPL, Inc.	500 Ambassador Caffery Parkway Scott, LA 70583	337-237-4775	Laboratory Analytical (04/06 to present)
EA Engineering, Science & Technology, Inc.	15 Loveton Circle Sparks, MD 21152	410-771-4950	Annual WET/TMP Analyses
Quality Environmental Solutions, Inc.	2521 Riva Road, Suite L3 Annapolis, MD 21401	410-841-5552	Field pH & Temperature
Air Water & Soil Laboratories	2109A North Hamilton Street Richmond, VA 23230	804-358-8295	Hydrostatic Test Samples
TestAmerica	2960 Foster Creighton Drive Nashville, TN 37204	800-765-0980	Outfall Samples (prior to 04/06)

IX. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. NAME & OFFICIAL TITLE (*type or print*)	B. PHONE NO. (*area code & no.*)
David Hildreth, Director, Field Operations	(770) 751-4000
C. SIGNATURE	D. DATE SIGNED
David Hildreth	12/14/2007

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (*use the same format*) instead of completing these pages.
SEE INSTRUCTIONS.

EPA I.D. NUMBER (*copy from Item 1 of Form 1*): VAD041317876

V. INTAKE AND EFFLUENT CHARACTERISTICS *(continued from page 3 of Form 2-C)*

OUTFALL NO.: 001

PART A –You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT a. MAXIMUM DAILY VALUE (1) CONCENTRATION	a. MAXIMUM DAILY VALUE (2) MASS	b. MAXIMUM 30 DAY VALUE (*if available*) (1) CONCENTRATION	b. MAXIMUM 30 DAY VALUE (*if available*) (2) MASS	c. LONG TERM AVRG. VALUE (*if available*) (1) CONCENTRATION	c. LONG TERM AVRG. VALUE (*if available*) (2) MASS	d. NO. OF ANALYSES	3. UNITS (*specify if blank*) a. CONCENTRATION	3. UNITS b. MASS	4. INTAKE (*optional*) a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	4. INTAKE a. LONG TERM AVERAGE VALUE (2) MASS	4. INTAKE b. NO. OF ANALYSES
a. Biochemical Oxygen Demand (*BOD*)	< 6	< 11	N/A	N/A	N/A	N/A	1	mg/L	pounds			
b. Chemical Oxygen Demand (*COD*)	9.2	17	N/A	N/A	N/A	N/A	1	mg/L	pounds			
c. Total Organic Carbon (*TOC*)	11.60	22	N/A	N/A	5.57	10	35	mg/L	pounds			
d. Total Suspended Solids (*TSS*)	89	167	N/A	N/A	11.9	22	35	mg/L	pounds			
e. Ammonia (*as N*)	< 1	< 2	N/A	N/A	N/A	N/A	2	mg/L	pounds			
f. Flow	VALUE 0.44		VALUE N/A		VALUE 0.19		36	MGD	N/A	VALUE		
g. Temperature (*winter*)	VALUE 12		VALUE N/A		VALUE 9		9	°C		VALUE		
h. Temperature (*summer*)	VALUE 28		VALUE N/A		VALUE 26		8	°C		VALUE		
i. pH	MINIMUM 6.3	MAXIMUM 9.9	MINIMUM N/A	MAXIMUM N/A			35	STANDARD UNITS				

PART B – Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (*if available*)	2. MARK "X" a. BELIEVED PRESENT	2. MARK "X" b. BELIEVED ABSENT	3. EFFLUENT a. MAXIMUM DAILY VALUE (1) CONCENTRATION	a. MAXIMUM DAILY VALUE (2) MASS	b. MAXIMUM 30 DAY VALUE (*if available*) (1) CONCENTRATION	b. MAXIMUM 30 DAY VALUE (*if available*) (2) MASS	c. LONG TERM AVRG. VALUE (*if available*) (1) CONCENTRATION	c. LONG TERM AVRG. VALUE (*if available*) (2) MASS	d. NO. OF ANALYSES	4. UNITS a. CONCENTRATION	4. UNITS b. MASS	5. INTAKE (*optional*) a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	5. INTAKE a. LONG TERM AVERAGE VALUE (2) MASS	5. INTAKE b. NO. OF ANALYSES
a. Bromide (24959-67-9)		X												
b. Chlorine, Total Residual		X												
c. Color		X												
d. Fecal Coliform		X												
e. Fluoride (16984-48-8)		X												
f. Nitrate-Nitrite (*as N*)		X	< 0.01	< 0.02	N/A	N/A	N/A	N/A	1	mg/L	pound			

NOTE: Part A data based on 3 years of flow and analytical data - see attached Table

ITEM V-B CONTINUED FROM FRONT

1. POLLUTANT AND CAS NO. (*if available*)	2. MARK "X"		3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (*if available*)		c. LONG TERM AVRG. VALUE (*if available*)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
g. Nitrogen, Total Organic (*as N*)	X		0.833	1.57	N/A	N/A	N/A	N/A	1	mg/L	pound			
h. Oil and Grease	X		< 5	< 9	N/A	N/A	N/A	N/A	1	mg/L	pound			
i. Phosphorus (as P), Total (7723-14-0)		X	< 0.05	< 0.1	N/A	N/A	N/A	N/A	1	mg/L	pound			
j. Radioactivity														
(1) Alpha, Total		X												
(2) Beta, Total		X												
(3) Radium, Total		X												
(4) Radium 226, Total		X												
k. Sulfate (*as SO_4*) (14808-79-8)		X												
l. Sulfide (*as S*)		X												
m. Sulfite (*as SO_3*) (14265-45-3)		X												
n. Surfactants		X												
o. Aluminum, Total (7429-90-5)		X												
p. Barium, Total (7440-39-3)		X												
q. Boron, Total (7440-42-8)		X												
r. Cobalt, Total (7440-48-4)		X												
s. Iron, Total (7439-89-6)		X												
t. Magnesium, Total (7439-95-4)		X												
u. Molybdenum, Total (7439-98-7)		X												
v. Manganese, Total (7439-96-5)		X												
w. Tin, Total (7440-31-5)		X												
x. Titanium, Total (7440-32-6)		X												

EPA I.D. NUMBER (*copy from Item 1 of Form 1*)	OUTFALL NUMBER
VAD041317876	001

CONTINUED FROM PAGE 3 OF FORM 2-C

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (*secondary industries, nonprocess wastewater outfalls, and nonrequired GC/MS fractions*), mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4 dinitrophenol, or 2-methyl-4, 6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (*all 7 pages*) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (*if available*)		c. LONG TERM AVRG. VALUE (*if available*)		d. NO. OF ANALYSES	a. CONCEN-TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, CYANIDE, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-0)			X												
2M. Arsenic, Total (7440-38-2)			X												
3M. Beryllium, Total (7440-41-7)			X												
4M. Cadmium, Total (7440-43-9)			X												
5M. Chromium, Total (7440-47-3)			X												
6M. Copper, Total (7440-50-8)			X												
7M. Lead, Total (7439-92-1)			X	< 0.01	< 0.02	N/A	N/A	N/A	N/A	2	mg/L	pound			
8M. Mercury, Total (7439-97-6)			X												
9M. Nickel, Total (7440-02-0)			X												
10M. Selenium, Total (7782-49-2)			X												
11M. Silver, Total (7440-22-4)			X												
12M. Thallium, Total (7440-28-0)			X												
13M. Zinc, Total (7440-66-6)			X												
14M. Cyanide, Total (57-12-5)			X												
15M. Phenols, Total			X												
DIOXIN															
2,3,7,8-Tetra-chlorodibenzo-P-Dioxin (1764-01-6)			X	DESCRIBE RESULTS											

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (*if available*)		c. LONG TERM AVRG. VALUE (*if available*)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – VOLATILE COMPOUNDS															
1V. Accrolein (107-02-8)			X	< 50	< 0.1	N/A	N/A	N/A	N/A	1	ug/L	pounds			
2V. Acrylonitrile (107-13-1)			X	< 60	< 0.1	N/A	N/A	N/A	N/A	1	ug/L	pounds			
3V. Benzene (71-43-2)		X		< 5	< 0.01	N/A	N/A	N/A	N/A	4	ug/L	pounds			
4V. Bis (*Chloromethyl*) Ether (542-88-1)			X												
5V. Bromoform (75-25-2)			X	< 5	< 0.01	N/A	N/A	N/A	N/A	1	ug/L	pounds			
6V. Carbon Tetrachloride (56-23-5)			X	< 5	< 0.01	N/A	N/A	N/A	N/A	1	ug/L	pounds			
7V. Chlorobenzene (108-90-7)			X	< 5	< 0.01	N/A	N/A	N/A	N/A	1	ug/L	pounds			
8V. Chlorodibromomethane (124-48-1)			X	< 5	< 0.01	N/A	N/A	N/A	N/A	1	ug/L	pounds			
9V. Chloroethane (75-00-3)			X	< 10	< 0.02	N/A	N/A	N/A	N/A	1	ug/L	pounds			
10V. 2-Chloroethylvinyl Ether (110-75-8)			X	< 10	< 0.02	N/A	N/A	N/A	N/A	1	ug/L	pounds			
11V. Chloroform (67-66-3)			X	< 5	< 0.01	N/A	N/A	N/A	N/A	1	ug/L	pounds			
12V. Dichlorobromomethane (75-27-4)			X	< 5	< 0.01	N/A	N/A	N/A	N/A	1	ug/L	pounds			
13V. Dichlorodifluoromethane (75-71-8)			X	< 5	< 0.01	N/A	N/A	N/A	N/A	1	ug/L	pounds			
14V. 1,1-Dichloroethane (75-34-3)			X	< 5	< 0.01	N/A	N/A	N/A	N/A	1	ug/L	pounds			
15V. 1,2-Dichloroethane (107-06-2)			X	< 5	< 0.01	N/A	N/A	N/A	N/A	1	ug/L	pounds			
16V. 1,1-Dichloroethylene (75-35-4)			X	< 5	< 0.01	N/A	N/A	N/A	N/A	1	ug/L	pounds			
17V. 1,2-Dichloropropane (78-87-5)			X	< 5	< 0.01	N/A	N/A	N/A	N/A	1	ug/L	pounds			
18V. 1,3-Dichloropropylene (542-75-6)			X	< 5	< 0.01	N/A	N/A	N/A	N/A	1	ug/L	pounds			
19V. Ethylbenzene (100-41-4)		X		< 5	< 0.01	N/A	N/A	N/A	N/A	4	ug/L	pounds			
20V. Methyl Bromide (74-83-9)			X	< 10	< 0.02	N/A	N/A	N/A	N/A	1	ug/L	pounds			
21V. Methyl Chloride (74-87-3)			X	< 10	< 0.02	N/A	N/A	N/A	N/A	1	ug/L	pounds			

CONTINUED FROM PAGE V-4

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (*if available*)		c. LONG TERM AVRG. VALUE (*if available*)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – VOLATILE COMPOUNDS (*continued*)															
22V. Methylene Chloride (75-09-2)			X	< 5	< 0.01	N/A	N/A	N/A	N/A	1	ug/L	pounds			
23V. 1,1,2,2-Tetrachloroethane (79-34-5)			X	< 5	< 0.01	N/A	N/A	N/A	N/A	1	ug/L	pounds			
24V. Tetrachloro-ethylene (127-18-4)			X	< 5	< 0.01	N/A	N/A	N/A	N/A	1	ug/L	pounds			
25V. Toluene (108-88-3)		X		< 5	0.01	N/A	N/A	N/A	N/A	4	ug/L	pounds			
26V. 1,2-Trans-Dichloroethylene (156-60-5)			X	< 5	< 0.01	N/A	N/A	N/A	N/A	1	ug/L	pounds			
27V. 1,1,1-Trichloro-ethane (71-55-6)			X	< 5	< 0.01	N/A	N/A	N/A	N/A	1	ug/L	pounds			
28V. 1,1,2-Trichloro-ethane (79-00-5)			X	< 5	< 0.01	N/A	N/A	N/A	N/A	1	ug/L	pounds			
29V Trichloro-ethylene (79-01-6)			X	< 5	< 0.01	N/A	N/A	N/A	N/A	1	ug/L	pounds			
30V. Trichloro-fluoromethane (75-69-4)			X	< 5	< 0.01	N/A	N/A	N/A	N/A	1	ug/L	pounds			
31V. Vinyl Chloride (75-01-4)			X	< 10	< 0.02	N/A	N/A	N/A	N/A	1	ug/L	pounds			
GC/MS FRACTION – ACID COMPOUNDS															
1A. 2-Chlorophenol (95-57-8)			X												
2A. 2,4-Dichloro-phenol (120-83-2)			X												
3A. 2,4-Dimethyl-phenol (105-67-9)			X												
4A. 4,6-Dinitro-O-Cresol (534-52-1)			X												
5A. 2,4-Dinitro-phenol (51-28-5)			X												
6A. 2-Nitrophenol (88-75-5)			X												
7A. 4-Nitrophenol (100-02-7)			X												
8A. P-Chloro-M-Cresol (59-50-7)			X												
9A. Pentachloro-phenol (87-86-5)			X												
10A. Phenol (108-95-2)			X												
11A. 2,4,6-Trichloro-phenol (88-05-2)			X												

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (*if available*)		c. LONG TERM AVRG. VALUE (*if available*)		d. NO. OF ANALYSES	a. CONCEN-TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS															
1B. Acenaphthene (83-32-9)			X												
2B. Acenaphtylene (208-96-8)			X												
3B. Anthracene (120-12-7)			X												
4B. Benzidine (92-87-5)			X												
5B. Benzo (*a*) Anthracene (56-55-3)			X												
6B. Benzo (*a*) Pyrene (50-32-8)			X												
7B. 3,4-Benzo-fluoranthene (205-99-2)			X												
8B. Benzo (*ghi*) Perylene (191-24-2)			X												
9B. Benzo (*k*) Fluoranthene (207-08-9)			X												
10B. Bis (*2-Chloro-ethoxy*) Methane (111-91-1)			X												
11B. Bis (*2-Chloro-ethyl*) Ether (111-44-4)			X												
12B. Bis (*2-Chloroisopropyl*) Ether (102-80-1)			X												
13B. Bis (*2-Ethyl-hexyl*) Phthalate (117-81-7)			X												
14B. 4-Bromophenyl Phenyl Ether (101-55-3)			X												
15B. Butyl Benzyl Phthalate (85-68-7)			X												
16B. 2-Chloro-naphthalene (91-58-7)			X												
17B. 4-Chloro-phenyl Phenyl Ether (7005-72-3)			X												
18B. Chrysene (218-01-9)			X												
19B. Dibenzo (*a,h*) Anthracene (53-70-3)			X												
20B. 1,2-Dichloro-benzene (95-50-1)			X												
21B. 1,3-Di-chloro-benzene (541-73-1)			X												

CONTINUE ON PAGE V-7

CONTINUED FROM PAGE V-6

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (*if available*)		c. LONG TERM AVRG. VALUE (*if available*)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (*continued*)															
22B. 1,4-Dichlorobenzene (106-46-7)			X												
23B. 3,3-Dichlorobenzidine (91-94-1)			X												
24B. Diethyl Phthalate (84-66-2)			X												
25B. Dimethyl Phthalate (131 -11-3)			X												
26B. Di-N-Butyl Phthalate (84-74-2)			X												
27B. 2,4-Dinitrotoluene (121-14-2)			X												
28B. 2,6-Dinitrotoluene (606-20-2)			X												
29B. Di-N-Octyl Phthalate (117-84-0)			X												
30B. 1,2-Diphenylhydrazine (*as Azobenzene*) (122-66-7)			X												
31B. Fluoranthene (206-44-0)			X												
32B. Fluorene (86-73-7)			X												
33B. Hexachlorobenzene (118-74-1)			X												
34B. Hexachlorobutadiene (87-68-3)			X												
35B. Hexachlorocyclopentadiene (77-47-4)			X												
36B Hexachloroethane (67-72-1)			X												
37B. Indeno (*1,2,3-cd*) Pyrene (193-39-5)			X												
38B. Isophorone (78-59-1)			X												
39B. Naphthalene (91-20-3)		X		< 10	<0.02	N/A	N/A	N/A	N/A	3	ug/L	pounds			
40B. Nitrobenzene (98-95-3)			X												
41B. N-Nitrosodimethylamine (62-75-9)			X												
42B. N-Nitrosodi-N-Propylamine (621-64-7)			X												

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (*if available*)		c. LONG TERM AVRG. VALUE (*if available*)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (*continued*)															
43B. N-Nitro-sodiphenylamine (86-30-6)			X												
44B. Phenanthrene (85-01-8)			X												
45B. Pyrene (129-00-0)			X												
46B. 1,2,4-Tri-chlorobenzene (120-82-1)			X												
GC/MS FRACTION – PESTICIDES															
1P. Aldrin (309-00-2)			X												
2P. α-BHC (319-84-6)			X												
3P. β-BHC (319-85-7)			X												
4P. γ-BHC (58-89-9)			X												
5P. δ-BHC (319-86-8)			X												
6P. Chlordane (57-74-9)			X												
7P. 4,4'-DDT (50-29-3)			X												
8P. 4,4'-DDE (72-55-9)			X												
9P. 4,4'-DDD (72-54-8)			X												
10P. Dieldrin (60-57-1)			X												
11P. α-Enosulfan (115-29-7)			X												
12P. β-Endosulfan (115-29-7)			X												
13P. Endosulfan Sulfate (1031-07-8)			X												
14P. Endrin (72-20-8)			X												
15P. Endrin Aldehyde (7421-93-4)			X												
16P. Heptachlor (76-44-8)			X												

CONTINUE ON PAGE V-9

EPA I.D. NUMBER (*copy from Item 1 of Form 1*)	OUTFALL NUMBER
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CONTINUED FROM PAGE V-8

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (*if available*)		c. LONG TERM AVRG. VALUE (*if available*)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – PESTICIDES (*continued*)															
17P. Heptachlor Epoxide (1024-57-3)			X												
18P. PCB-1242 (53469-21-9)			X												
19P. PCB-1254 (11097-69-1)			X												
20P. PCB-1221 (11104-28-2)			X												
21P. PCB-1232 (11141-16-5)			X												
22P. PCB-1248 (12672-29-6)			X												
23P. PCB-1260 (11096-82-5)			X												
24P. PCB-1016 (12674-11-2)			X												
25P. Toxaphene (8001-35-2)			X												

VPDES PERMIT RENEWAL APPLICATION
VPDES PERMIT VA0058378
KINDER MORGAN SOUTHEAST TERMINALS, LLC
RICHMOND #2 TERMINAL

EPA Form 3510-2C, Line IIB & IIC

Weather Data from Richmond Airport Weather Station (1948-2005)

Average Annual Rainfall (inches)	43.65
Average Number of Rain Days (> 0.01 inch)	114
Maximum Daily Rainfall (inches-08/12/1955)	8.79

Terminal Data

Total Drainage Area (square feet)	741,094
Loading Rack Drainage Area (square feet)	2,500
Assume 1 Hydrostatic Test/Year (MG)	2.26

Terminal Storm-Water Runoff

Average Flow = Average Annual Rainfall * Surface Area * Conversion Factors
Average Annual Flow = (43.65"/yr) (738,594 ft^2) (1'/12") (7.48 gal/ft^3) (1 MG/10^6 gal)
Average Annual Flow = 20.10 MG
Average Daily Flow = 20.10 MG/114 days = **0.18 MGD**
Maximum Daily Flow = Maximum Daily Rainfall * Surface Area * Conversion Factors
Maximum Daily Flow = (8.79"/day) (738,594 ft^2) (1'/12") (7.48 gal/ft^3) (1 MG/10^6 gal)
Maximum Daily Flow = **4.05 MGD**

Loading Rack Storm-Water Runoff

Average Flow = Average Annual Rainfall * Surface Area * Conversion Factors
Average Annual Flow = (43.65"/yr) (2,500 ft^2) (1'/12") (7.48 gal/ft^3) (1 MG/10^6 gal)
Average Annual Flow = 0.07 MG
Average Daily Flow = 0.07 MG/114 days = **0.001 MGD**
Maximum Daily Flow = Maximum Daily Rainfall * Surface Area * Conversion Factors
Maximum Daily Flow = (8.79"/day) (2,500 ft^2) (1'/12") (7.48 gal/ft^3) (1 MG/10^6 gal)
Maximum Daily Flow = **0.01 MGD**

Hydrostatic Test Water

Average of 1.37 MG per year (based on average capacity of the 17 storage tanks with > 420,000 gallon capacity with one hydrostatic test/year)
Average Discharge = 1.37 MG/365 days
Average Discharge = **0.004 MGD**
Maximum Discharge = **0.36 MGD** (250 GPM)

VPDES PERMIT RENEWAL APPLICATION
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KINDER MORGAN SOUTHEAST TERMINALS, LLC
RICHMOND #2 TERMINAL
EPA Form 3510-2C, Part V

Sample Date	Average Flow (MGD)	pH (su)	BOD (mg/L)	COD (mg/L)	TOC (mg/L)	TSS (mg/L)	Ammonia as N (mg/L)	TPH-DRO 8015B (mg/L)	O&G 1664A (mg/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Xylenes (ug/L)	Naphthalene (ug/L)
November-07	0.04	**6.3**			5.13	ND (4)	ND (1)	0.24	ND (5)	ND (5)	ND (5)	ND (5)	ND 5)	9.4
October-07	0.33	7.8			4.75	ND (4)		ND (0.1)						
September-07	0.17	7.7	< 6	9.2	4.85	ND (4)	0.063	ND (0.1)		ND (5)	ND (5)	ND (5)	ND 5)	
August-07	0.35	6.4			7.33	4		0.18						
July-07	**0.00**	No Discharge												
June-07	0.17	7.9			6.70	6		ND (0.1)						
May-07	0.19	7.4			6.66	5		ND (0.1)						
April-07	0.24	7.9			6.00	ND (4)		0.24						
March-07	0.24	8.3			4.84	49		0.19						
February-07	0.19	8.1			3.97	**89**		0.12						
January-07	0.16	7.2			4.35	20		0.29						
December-06	0.09	7.3			3.26	ND (4)		0.23						
November-06	**0.44**	7.5			4.14	8		ND (0.1)						
October-06	0.36	6.9			3.99	ND (4)		0.06						
September-06	0.40	7.4			4.03	8		0.26						
August-06	0.39	7.8			10.70	21		**0.73**						
July-06	0.27	8.9			6.12	ND (4)		0.14						
June-06	0.23	8.9			7.85	ND (4)		ND (0.1)						
May-06	0.21	8.9			8.23	ND (4)		ND (0.1)						
April-06	0.13	8.1			6.97	13		ND (0.1)						
March-06	0.08	7.8			3.88	4		0.14						
February-06	0.08	7.7			4.46	6.6		0.42						
January-06	0.15	6.8			2.53	12.8		0.32						
December-05	0.22	8.2			4.01	10.3		0.24						
November-05	0.25	8.6			5.75	42.3		0.68						
October-05	0.17	8.3			**11.60**	4.7		0.54						
September-05	0.01	8.7			5.24	2.4		0.30						
August-05	0.13	8.4			3.74	7.6		0.34						
July-05	0.33	8.1			4.95	1.9		0.28						
June-05	0.07	8.7			8.32	7.5		0.49						
May-05	0.18	8.7			7.23	7.2		0.44						
April-05	0.09	7.9			4.35	8.0		0.28						
March-05	0.17	8.1			5.75	5.1		0.33						
February-05	0.08	**9.9**			4.43	23		0.30						
January-05	0.13	8.8			5.42	8.8		0.38						
December-04	0.14	8.3			3.35	40.3		0.31						
Averages	*0.19*	*8.0*			*5.57*	*11.9*		*0.24*						
March-07	Hydrostatic Test - Tank 5								ND (5)	ND (1)	1.2	ND (1)	ND (6)	ND (10)
March-07	Hydrostatic Test - Tank 17								ND (5)	ND (1)	ND (1)	ND (1)	ND (6)	ND (10)

ND = None Detected (Reporting Limit in parentheses)

Please print or type in the unshaded areas only.

EPA ID Number (*copy from Item 1 of Form 1*)
VAD041317876

Form Approved. OMB No. 2040-0086
Approval expires 5-31-92

FORM 2F NPDES

U.S. Environmental Protection Agency
Washington, DC 20460

Application for Permit to Discharge Storm Water Discharges Associated with Industrial Activity

Paperwork Reduction Act Notice

Public reporting burden for this application is estimated to average 28.6 hours per application, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate, any other aspect of this collection of information, or suggestions for improving this form, including suggestions which may increase or reduce this burden to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, DC 20460, or Director, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

I. Outfall Location

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

A. Outfall Number (*list*)	B. Latitude			C. Longitude			D. Receiving Water (*name*)
001	37.00	28.00	16.00	77.00	25.00	25.00	James River

II. Improvements

A. Are you now required by any Federal, State, or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

1. Identification of Conditions, Agreements, Etc.	2. Affected Outfalls		3. Brief Description of Project	4. Final Compliance Date	
	number	source of discharge		a. req.	b. proj.
N/A					

B: You may attach additional sheets describing any additional water pollution (or other environmental projects which may affect your discharges) you now have under way or which you plan. Indicate whether each program is now under way or planned, and indicate your actual or planned schedules for construction.

III. Site Drainage Map

Attach a site map showing topography (or indicating the outline of drainage areas served by the outfalls(s) covered in the application if a topographic map is unavailable) depicting the facility including: each of its intake and discharge structures; the drainage area of each storm water outfall; paved areas and buildings within the drainage area of each storm water outfall, each known past or present areas used for outdoor storage of disposal of significant materials, each existing structural control measure to reduce pollutants in storm water runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied; each of its hazardous waste treatment, storage or disposal units (including each area not required to have a RCRA permit which is used for accumulating hazardous waste under 40 CFR 262.34); each well where fluids from the facility are injected underground; springs, and other surface water bodies which received storm water discharges from the facility.

Continue on Page 2

Continued from the Front

IV. Narrative Description of Pollutant Sources

A. For each outfall, provide an estimate of the area (include units) of imperious surfaces (including paved areas and building roofs) drained to the outfall, and an estimate of the total surface area drained by the outfall.

Outfall Number	Area of Impervious Surface *(provide units)*	Total Area Drained *(provide units)*	Outfall Number	Area of Impervious Surface *(provide units)*	Total Area Drained *(provide units)*
001	350,000 square feet	741,094 square feet			

B. Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored or disposed in a manner to allow exposure to storm water; method of treatment, storage, or disposal; past and present materials management practices employed to minimize contact by these materials with storm water runoff; materials loading and access areas, and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied.

The Kinder Morgan Richmond 2 Terminal is a storage and distribution facility for petroleum products including gasoline, ethanol, naphtha, petroleum distillates kerosene, diesel fuel and heating oil, and asphalt products. Products are stored in aboveground storage tanks within containment diked areas. Products are distributed by transport vehicles. Product pumping, loading and unloading activities at the rack represent the greatest likelihood of exposure to storm water. Storm-water runoff from the rack area is directed to an oil/water separator followed by activated clay and carbon treatment prior to flow into the settling/fire pond. Site runoff outside the loading rack area is also directed to the settling pond prior to manual discharge to the James River on an as needed basis. Regular inspections, good housekeeping practices, maintenance and repair, spill prevention and response, and employee training are practices and techniques employed to minimize contact between petroleum products and storm water. The locations of the storage tanks, loading rack, settling pond and other site features are shown on the attached Site Plan. Pesticides, herbicides, soil conditioners and fertilizer are not used in significant quantities.

C. For each outfall, provide the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of the treatment the storm water receives, including the schedule and type of maintenance for control and treatment measures and the ultimate disposal of any solid or fluid wastes other than by discharge.

Outfall Number	Treatment	List Codes from Table 2F-1
001	Storm-water runoff flows to the facility settling/fire pond prior to manual discharge through Outfall 001 on an as needed basis. Storm-waterfrom the loading rack area is directed to an oil/water separator with subsequent activated clay and carbon treatment prior to discharge into the settling pond.	1-U, XX, 1-C, 2-A

V. Nonstormwater Discharges

A. I certify under penalty of law hat the outfall(s) covered by this application have been tested or evaluated for the presence of nonstormwater discharges, and that all nonstormwater discharged from these outfall(s) are identified in either an accompanying Form 2C or From 2E application for the outfall.

Name and Official Title *(type or print)*	Signature	Date Signed
David Hildreth, Director, Field Ops		12/14/2007

B. Provide a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test.

Evaluation is based on site engineering and operator knowledge and facility construction and operation records. Non-storm-water discharges are identified on Form 2C (hydrostatic test water).

VI. Significant Leaks or Spills

Provide existing information regarding the history of significant leaks or spills of toxic or hazardous pollutants at the facility in the last three years, including the approximate date and location of the spill or leak, and the type and amount of material released.

None. There is an active VADEQ Storage Tank Program case that is the responsibility of the previous site owner.

EPA ID Number *(copy from Item 1 of Form 1)*
VAD041317876

VII. Discharge Information

A, B, C, & D: See instructions before proceeding. Complete one set of tables for each outfall. Annotate the outfall number in the space provided. Table VII-A, VII-B, VII-C are included on separate sheets numbers VII-1 and VII-2.

E. Potential discharges not covered by analysis – is any toxic pollutant listed in table 2F-2, 2F-3, or 2F-4, a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

☐ Yes (*list all such pollutants below*) ☑ No (*go to Section IX*)

VIII. Biological Toxicity Testing Data

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☑ Yes (*list all such pollutants below*) ☐ No (*go to Section IX*)

Annual acute toxicity testing is completed in accordance with the existing VPDES permit conditions. The 48-hour static tests with five test solutions are completed annually utilizing c. dubia.

12/07 test results not yet available
12/06 48-hour LC50 for c. dubia was > 100%
12/05 48-hour LC50 for c. dubia was > 100%

IX. Contract Analysis Information

Were any of the analyses reported in Item VII performed by a contract laboratory or consulting firm?

☑ Yes (*list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below*) ☐ No (*go to Section X*)

A. Name	B. Address	C. Area Code & Phone No.	D. Pollutants Analyzed
SPL, Inc.	500 Ambassador Caffery Parkway Scott, LA 70583	337-237-4775	Laboratory Analytical (04/06 to present)
EA Engineering, Science & Technology, Inc.	15 Loveton Circle Sparks, MD 21152	410-771-4950	Annual WET/TMP Analyses
Quality Environmental Solutions, Inc.	2521 Riva Road, Suite L3 Annapolis, MD 21401	410-841-5552	Field pH & Temperature
Air Water & Soil Laboratories	2109A North Hamilton Street Richmond, VA 23230	804-358-8295	Hydrosatic Test Samples
TestAmerica	2960 Foster Creighton Drive Nashville, TN 37204	800-765-0980	Outfall Samples (prior to 04/06)

X. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. Name & Official Title (*Type Or Print*)	B. Area Code and Phone No.
David Hildreth, Director, Field Operations	(770) 751-4000
C. Signature	D. Date Signed
David Hildreth	12/14/2007

EPA ID Number (*copy from Item 1 of Form 1*)
VAD041317876

Form Approved. OMB No. 2040-0086
Approval expires 5-31-92

VII. Discharge information *(Continued from page 3 of Form 2F)*

Part A – You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite		
Oil and Grease	< 5 mg/L	N/A	< 5 mg/L	N/A	1.00	Bulk Petroleum Storage/Distribution
Biological Oxygen Demand (BOD5)	< 6 mg/L	N/A	< 6 mg/L	N/A	1.00	Natural Processes
Chemical Oxygen Demand (COD)	9.2 mg/L	N/A	9.2 mg/L	N/A	1.00	Natural Processes
Total Suspended Solids (TSS)	89 mg/L	N/A	11.9 mg/L	N/A	35.00	Natural Processes
Total Nitrogen	0.833 mg/L	N/A	0.833 mg/L	N/A	1.00	Natural Processes
Total Phosphorus	< 0.05 mg/L	N/A	< 0.05 mg/L	N/A	1.00	Natural Processes
pH	Minimum 6.30	Maximum 9.90	Minimum 8.00	Maximum 8.00	35.00	Natural Processes

Part B – List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite		
TPH-DRO	0.73 mg/L	N/A	0.24 mg/L	N/A	35.00	Bulk Petroleum Storage/Distribution
TSS	89 mg/L	N/A	11.9 mg/L	N/A	35.00	Natural Processes
TOC	11.60 ug/L	N/A	5.57 ug/L	N/A	35.00	Natural Processes
pH	9.9 su	N/A	8.0 su	N/A	35.00	Natural Processes

Continued from the Front

Part C - List each pollutant shown in Table 2F-2, 2F-3, and 2F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite		
Benzene	< 5 ug/L	N/A	< 5 ug/L	N/A	4.00	Bulk Petroleum Storage/Distribution
Toluene	< 5 ug/L	N/A	< 5 ug/L	N/A	4.00	Bulk Petroleum Storage/Distribution
E. Benzene	< 5 ug/L	N/A	< 5 ug/L	N/A	4.00	Bulk Petroleum Storage/Distribution
Naphthalen	< 10 ug/L	N/A	< 10 ug/L	N/A	3.00	Bulk Petroleum Storage/Distribution

Part D – Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.

1. Date of Storm Event	2. Duration of Storm Event *(in minutes)*	3. Total rainfall during storm event *(in inches)*	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event *(gallons/minute or specify units)*	6. Total flow from rain event *(gallons or specify units)*
N/A - No flow weighted composite sampling					

7. Provide a description of the method of flow measurement or estimate.

Flow data based on monthly rainfall data from the Richmond Airport weather station. Flows are estimated based on maximum and average monthly rainfall over the paved areas and tank field diked area.

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RICHMOND #2 TERMINAL

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Sample Date	pH (su)	O&G 1664A (mg/L)	BOD (mg/L)	COD (mg/L)	TSS (mg/L)	Total Nitrogen (mg/L)	Nitrate-Nitrite (mg/L)	TKN (mg/L)	Total Phosphorous (mg/L)	TOC (mg/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Xylenes (ug/L)	Naphthalene (ug/L)
November-07	**6.3**	**ND (5)**			ND (4)	0.833	ND (0.01)	0.77	ND (0.05)	5.13	ND (5)	ND (5)	ND (5)	ND (5)	9.4
October-07	7.8				ND (4)					4.75					
September-07	7.7		< 6	9.2	ND (4)					4.85	ND (5)	ND (5)	ND (5)	ND (5)	
August-07	6.4				4					7.33					
July-07	No Discharge														
June-07	7.9				6					6.70					
May-07	7.4				5					6.66					
April-07	7.9				ND (4)					6.00					
March-07	8.3				49					4.84					
February-07	8.1				**89**					3.97					
January-07	7.2				20					4.35					
December-06	7.3				ND (4)					3.26					
November-06	7.5				8					4.14					
October-06	6.9				ND (4)					3.99					
September-06	7.4				8					4.03					
August-06	7.8				21					10.70					
July-06	8.9				ND (4)					6.12					
June-06	8.9				ND (4)					7.85					
May-06	8.9				ND (4)					8.23					
April-06	8.1				13					6.97					
March-06	7.8				4					3.88					
February-06	7.7				6.6					4.46					
January-06	6.8				12.8					2.53					
December-05	8.2				10.3					4.01					
November-05	8.6				42.3					5.75					
October-05	8.3				4.7					**11.60**					
September-05	8.7				2.4					5.24					
August-05	8.4				7.6					3.74					
July-05	8.1				1.9					4.95					
June-05	8.7				7.5					8.32					
May-05	8.7				7.2					7.23					
April-05	7.9				8.0					4.35					
March-05	8.1				5.1					5.75					
February-05	**9.9**				23					4.43					
January-05	8.8				8.8					5.42					
December-04	8.3				40.3					3.35					
Averages	*8.0*				*11.9*					*5.57*					

ND = None Detected (Reporting Limit in parentheses)